Notes, Mainly Diagnostic, on Ceuthorhynchus pulvinatus Gyll. (Col.: Curculionidae). - When Canon W.W. Fowler wrote his magnum opus towards the end of last century, this species was exceedingly poorly known as British and regarded as very rare. Even as late as the 1960s it appeared to be unrepresented in the National (Power) Collection at the BMNH, although one of the three records given by Fowler (for Hastings) was due to Power Rather surprisingly, no further ones appeared in the Supplement (1913); and it was only considerably later that C. pulvinatus became known as an inhabitant of the Breck district of East Anglia, and that its foodplant was flixweed, Sisymbrium sophia L. (now placed in a genus Descurainia). The weevil was present in large numbers on this plant near Mildenhall, Suffolk, on 21-22 June 1981, but only a minority had the clothing of scales quite intact. Mixed with them were 3 or 4 of the very closely similar C.pyrrhorhynchus Marsh. and 2 C. floralis Payk.; but at least one of the former came off a plant of S. officinale L. (its normal host), and the others may well have done, so it would appear that at least to a great extent the species keep to their respective hosts.

The characters that distinguish pulvinatus from pyrrhorhynchus are highly comparative, apart from a sexual one not given in British works. This last concerns the tooth at the inner apex of the middle and hind tibiae of the male, which in pyrrhorhynchus is of normal form (i.e. tapering to a point), but in pulvinatus is almost peg-like and quite blunt. The difference is very plain, and decisive for males; it is figured by Dieckmann (1972, Beitr. Ent., 22 (1-2): 111, figs. 129,131 ). On the other hand my males scarcely show any perceptible difference in the form of the corbel (apical area bearing externally a comb of spines) of these tibiae, such as the above figures indicate for the two species. Fowler's "large straight hook" (referring to the $0^{*}$ of pyrrhorhynchus) is something of an overstatement (1891, Col. Brit. Isl., 5: 362), besides being oddly selfcontradictory.

Unfortunately, females seem to predominate in these species, and in that sex close comparison of the two is necessary for certain discrimination, unless the foodplant (practically diagnostic) happens to be known. Unfortunately, again, the characters based upon colour given in all the keys are not fully dependable. Thus, if of pyrrhorhynchus with rostrum, front of pronotum, and tibiae almost or quite as dark as in pulvinatus appear to be common; whilst, conversely, one of my series of the last-named has the rostrum (except basally) and tibiae reddish, yet is not otherwise immaturely coloured and is undoubted pulvinatus on the criteria of body-form etc. In Fowler's description of that species, the character attributed to Thomson of thicker scaling is barely perceptible, whereas those he attributes to Bedel are valid - with the reservation already expressed regarding colour. Thus, pulvinatus is of slightly more rounded form with slightly shorter elytra and more transverse thorax more strongly and smoothly curved at sides (hence the name: pulvinate= cushioned), more constricted in front and more closely embracing
the sides of the head. These differences are small, but evident when the insects are side by side. Finally, the rarer species has the antennae, especially the first two funicular segments, distinctly shorter; the tarsi slenderer, notably the claw-joint, and the lobes of the preceding one smaller.

The characters given by Joy (1932, Pract. Handb. Brit. Beet., 1: 199-200) to separate these two species are quite unusable. Since he places C. palustris Edm. between them, I should perhaps add that this 'species' (of which I have examined a specimen from the type material) is only a dwarf form of the common and variable C. floralis with the scales of the upper surface incompletely developed and hair-like. - A. A. Allen, 49 Montcalm Road, Charlton, London SE7 8QG.

The Biology of Isotrias rectifasciana (HAWORTH).-Although this is a common species, its life history is still unknown. A pupa was once beaten from hawthorn, giving rise to the belief that that was the foodplant. Mr. J. M. Chalmers-Hunt obtained ova from a captured female and gave the resultant larvae the foliage of hawthorn and elm. This they accepted with apparent reluctance, for casualties were high and the survivors disappeared during the winter. The adults frequent lanes and hedgerows and are usually encountered singly or in small numbers.

It therefore came as a surprise during a visit to the ranges at Foulness, Essex on the 22nd of June to encounter a vigorous colony on a sea-wall overlooking salt-marsh; there was not a tree or bush in sight. The moths were flying freely around, and settling on, sea-beet (Beta vulgaris subsp. maritima) and golden samphire (Inula crithmoides), the tallest plants present, at about 7.30 pm . I probably saw as many moths in five minutes as one normally sees in as many seasons and they had certainly bred on the spot.

The inference is that the larvae are polyphagous on herbaceous plants or, perhaps more probably, that they feed on decaying vegetation. If I can obtain the necessary permit, I should like to collect leaf-litter from the sea-wall in late autumn or early spring to see if it contains larvae.-A. M. Emmet, Labrey Cottage, Victoria Gardens, Saffron Walden, Essex, CB11 3AF. 25 June 1981.

Blair's Shoulder-knot: Lithophane leautieri Boisd. in the Isle of Sheppey, Kent.-This moth, new to Sheppey, appeared regularly in my garden m.v. trap in 1980. It first appeared on September 6 continuing till October 12, and on September 20 over 30 were noted.-F. H. Clouter, Helice, Glendale Road, Minster-in-Sheppey, Kent.

The Painted Lady: Cynthia cardui L. in 1981.-In spite of indifferent weather, I saw one Painted Lady in Newton Dale (north of Pickering) on 12th June 1981, which may be a good omen for the species in Yorkshire.-S. M. JACKSON, 22 Armoury Road, Selby, N. Yorkshire YO8 0AY.

